167334   10/4/05

SEARCH REQUEST FORM   Scientific and Technical Information Center - EIC2800
Rev. 3/15/2004   This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date 9/29/05 Serial # 10/664,547 Priority Application Date _____

Your Name M.Lewis _____ Examiner # _____

AU 2822 Phone 272-1838 Room 5A30 _____

In what format would you like your results? Paper is the default.   (PAPER)   DISK   EMAIL

If submitting more than one search, please prioritize in order of need.   Need before 10/12

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?
Circle: USPT   DWPI   EPO Abs   JPO Abs   IBM TDB

Other:_____

What relevant art have you found so far? Please attach pertinent citations or
Information Disclosure Statements. _____
_____

What types of <u>references</u> would you like? Please checkmark:

Primary Refs ___✓___   Nonpatent Literature ___   Other _____
Secondary Refs ___✓___   Foreign Patents ____   _____
Teaching Refs ___

What is the topic, such as the <u>novelty</u>, motivation, utility, or other specific facets defining the desired <u>focus</u> of this search?   Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 49-53

Problem: See Pages 1-4.
Solution: "   "   4-8

Claims 9/95/05

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SYSTEM:OS  - DIALOG OneSearch
   File 350:Derwent WPIX 1963-2005/UD,UM &UP=200563
          (c) 2005  Thomson Derwent
*File 350: For more current information, include File 331 in your search.
Enter HELP NEWS 331 for details.
   File 347:JAPIO Nov 1976-2005/Apr(Updated 050801)
          (c) 2005 JPO & JAPIO
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Set	Items	Description
S1	191	S1:S38
S2	77	S1 AND (DRAM OR RAM OR SGRAM OR SDRAM OR SRAM OR EDRAM OR – RANDOM()ACCESS()MEMOR???? OR STATIC()RANDOM()ACCESS()MEMOR???? OR STATIC()RAM? ? OR DYNAMIC()RAM? ? OR DYNAMIC()RANDOM()ACC-ESS()MEMOR????)
S3	61	S2 AND (CAPACITOR? ? OR (PLANAR? OR STACK? OR TRENCH?)(2N)-CAPACITOR? ? OR CAPACITOR? ?(2N)(BIT OR BITLINE OR BIT()LINE) OR COB)
S4	2	S3 AND CONTACT?(2N)PILLAR? ?
S5	59	S3 NOT S4
S6	20	S5 AND (MEMOR?(2N)CELL? ? OR (MEMOR? OR CELL?)(2N)DENSIT?)
S7	0	S6 AND ((TRENCH? OR GROOVE? OR BURIED OR CHANNEL? OR EDGE? OR FLUSH OR RIDGE? OR SLOT? OR CHAMBER???? OR VESSEL??? OR SE-CTION???? OR MODUL???? OR ENCLOSUR??? OR TUNNEL?)(2N)(ISOLAT? OR INSULAT? OR OXIDE OR DIELECTRIC?) OR DEEP???(2N)TRENCH? ?)
S8	11	S6 AND ((INSULAT? OR DIELECTRIC? OR METAL? OR PMD)(2N)(LAY-ER??? OR FILM??? OR COAT??? OR MULTILAYER??? OR MULTI()LAYER?-???? OR SPACER??? OR INTERLAYER???? OR INTER()LAYER????? OR M-ULTIPLE()LAYER? ?))
S9	11	IDPAT (sorted in duplicate/non-duplicate order)
S10	11	IDPAT (primary/non-duplicate records only)
S11	9	S6 NOT S8
S12	9	IDPAT (sorted in duplicate/non-duplicate order)
S13	8	IDPAT (primary/non-duplicate records only)

SYSTEM:OS - DIALOG OneSearch
    File   2:INSPEC 1969-2005/Sep W4
            (c) 2005 Institution of Electrical Engineers
*File   2: Archive data back to 1898 has been added to File 2.
    File   6:NTIS 1964-2005/Sep W4
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    File 305:Analytical Abstracts 1980-2005/Sep W3
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*File 305: Alert feature enhanced for multiple files, duplicate
removal, customized scheduling. See HELP ALERT.
    File 315:ChemEng & Biotec Abs 1970-2005/Sep
            (c) 2005 DECHEMA
    File 350:Derwent WPIX 1963-2005/UD,UM &UP=200563
            (c) 2005 Thomson Derwent
*File 350: For more current information, include File 331 in your search.
Enter HELP NEWS 331 for details.
    File 347:JAPIO Nov 1976-2005/Apr(Updated 050801)
            (c) 2005 JPO & JAPIO
    File 344:Chinese Patents Abs Aug 1985-2005/May
            (c) 2005 European Patent Office
    File 371:French Patents 1961-2002/BOPI 200209
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*File 371: This file is not currently updating. The last update is 200209.
    File   23:CSA Technology Research Database 1963-2005/Sep
            (c) 2005 CSA.

EIC 2800   Irina Speckhard   272-2554

Set	Items	Description
S1	732	AU=(HOUSTON, T? OR HOUSTON T?)
S2	110	S1 AND (DRAM OR RAM OR SGRAM OR SDRAM OR SRAM OR EDRAM OR - RANDOM()ACCESS()MEMOR???? OR STATIC()RANDOM()ACCESS()MEMOR???? OR STATIC()RAM? ? OR DYNAMIC()RAM? ? OR DYNAMIC()RANDOM()ACC-ESS()MEMOR????)
S3	11	S2 AND (CAPACITOR? ? OR (PLANAR? OR STACK? OR TRENCH?)(2N)-CAPACITOR? ? OR CAPACITOR? ?(2N)(BIT OR BITLINE OR BIT()LINE) OR COB)
S4	6	S3 AND (MEMOR?(2N)CELL? ? OR (MEMOR? OR CELL?)(2N)DENSIT?)
S5	6	RD (unique items)
S6	5	S3 NOT S4
S7	4	RD (unique items)
S8	99	S2 NOT S3
S9	31	S8 AND (MEMOR?(2N)CELL? ? OR (MEMOR? OR CELL?)(2N)DENSIT?)
S10	28	RD (unique items)
S11	1	S10 AND IC=(H01L-027/108 OR H01L-029/76 OR H01L-029/94 OR - H01L-031/119)
S12	27	S10 NOT S11
S13	0	S12 AND CONTACT?(2N)PILLAR? ?
S14	2	S12 AND ((TRENCH? OR GROOVE? OR BURIED OR CHANNEL? OR EDGE? OR FLUSH OR RIDGE? OR SLOT? OR CHAMBER???? OR VESSEL??? OR S-ECTION???? OR MODUL???? OR ENCLOSUR??? OR TUNNEL?)(2N)(ISOLAT? OR INSULAT? OR OXIDE OR DIELECTRIC?) OR DEEP???(2N)TRENCH? ?)
S15	2	RD (unique items)
S16	25	S12 NOT S14
S17	4	S16 AND (SUBSTRAT? OR SURFACE? OR BASE? OR SUBSTRUCT? OR U-NDERSTRUCT? OR UNDERLAY? OR FOUNDATION? OR PANE? OR DISK? OR - DISC? OR WAFER? OR CC=(A6855 OR A8115 OR B0520 OR B2570) OR M-C=(T03-A01B OR T03-A01B1) OR IC=G11B-005/704)
S18	4	RD (unique items)
S19	21	S16 NOT S17
S20	21	RD (unique items)
S21	0	S20 AND ((INSULAT? OR DIELECTRIC? OR METAL? OR PMD)(2N)(LA-YER??? OR FILM??? OR COAT??? OR MULTILAYER??? OR MULTI()LAYER-????? OR SPACER??? OR INTERLAYER???? OR INTER()LAYER????? OR - MULTIPLE()LAYER? ?))
S22	0	S20 AND (DENSIT?(2N)(INCREAS? OR DECREAS? OR HIGHER OR LOW-ER))
S23	21	S20 AND (MEMOR?(2N)CELL? ? OR (MEMOR? OR CELL?)(2N)DENSIT?)
S24	1680046	(INTEGRAT????????(3N)(CIRCUIT???????? OR LOOP? ?)) OR IC OR CHIP? ?
S25	1067833	(INSULAT? OR DIELECTRIC? OR METAL? OR PMD)(2N)(LAYER??? OR FILM??? OR COAT??? OR MULTILAYER??? OR MULTI()LAYER???? OR S-PACER??? OR INTERLAYER???? OR INTER()LAYER????? OR MULTIPLE()-LAYER? ?)
S26	4897	IMD OR INTER()METAL()DIELECTRIC?
S27	1071340	S25:S26
S28	23641933	SUBSTRAT? OR SURFACE? OR BASE? OR SUBSTRUCT? OR UNDERSTRUC-T? OR UNDERLAY? OR FOUNDATION? OR PANE? OR DISK?
S29	9532837	DISC? OR WAFER? OR CC=(A6855 OR A8115 OR B0520 OR B2570) OR MC=(T03-A01B OR T03-A01B1) OR IC=G11B-005/704
S30	12047	STI OR SHALLOW()TRENCH()ISOLAT?
S31	135184	(TRENCH? OR GROOVE? OR BURIED OR CHANNEL? OR EDGE? OR FLUSH OR RIDGE? OR SLOT? OR CHAMBER???? OR VESSEL??? OR SECTION???? OR MODUL???? OR ENCLOSUR??? OR TUNNEL?)(2N)(ISOLAT? OR INSUL-AT? OR OXIDE OR DIELECTRIC?) OR DEEP???(2N)TRENCH? ?

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S32    141526   S30:S31
S33       526   CONTACT?(2N)PILLAR? ?
S34    508611   CAPACITOR? ? OR (PLANAR? OR STACK? OR TRENCH?)(2N)CAPACITO-
                   R? ? OR CAPACITOR? ?(2N)(BIT OR BITLINE OR BIT()LINE) OR COB
S35    249937   DRAM OR RAM OR SGRAM OR SDRAM OR SRAM OR EDRAM OR RANDOM()-
                   ACCESS()MEMOR???? OR STATIC()RANDOM()ACCESS()MEMOR???? OR STA-
                   TIC()RAM? ? OR DYNAMIC()RAM? ? OR DYNAMIC()RANDOM()ACCESS()ME-
                   MOR????
S36     37890   IC=(H01L-027/108 OR H01L-029/76 OR H01L-029/94 OR H01L-031-
                   /119)
S37    141495   MEMOR?(2N)CELL? ? OR (MEMOR? OR CELL?)(2N)DENSIT?
S38    261222   DENSIT?(2N)(INCREAS? OR DECREAS? OR HIGHER OR LOWER)
S39    756682   S27 AND (S28 OR S29)
S40     11798   S39 AND S35
S41      5741   S40 AND S34
S42         9   S41 AND S33
S43         9   RD (unique items)
S44      5732   S41 NOT S42
S45      1677   S44 AND S37
S46        92   S45 AND S38
S47        31   S46 AND S32
S48        19   S47 AND S36
S49        19   RD (unique items)
S50        12   S47 NOT S48
S51         4   S50 AND S24
S52         4   RD (unique items)
S53         8   S50 NOT S51
S54         8   S53 AND S31
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